WO 2005/054775 PCT/GB2004/004994

9

CLAIMS

1. A low energy cartridge comprising:

an outer casing;

a rear telescopically slidable portion disposed, in use, to be telescopically extendable with respect to the outer casing in a direction towards the breech-block of a firearm;

a front telescopically slidable portion disposed, in use, to be telescopically extendable with respect to the outer casing in a direction towards the barrel of a firearm;

means for causing each telescopically slidable portion, in use, too telescopically extend in reaction to firing of a firearm containing the cartridge;

an open end of the front portion configured to receive a projectile and means for propelling a projectile from the open end.

- 2. A low energy cartridge as claimed in claim 1 wherein the front telescopically extendable portion is made from a plastic, other pliable material or of composite construction so as to seal the front portion into the outer case and chamber of the gun.
- 3. A low energy cartridge as claimed in claim 1 or claim 2 further including a projectile received in the front portion of cartridge, the projectile comprising a bullet which is configured such that the bullet remains sealed in the front portion of the cartridge until a portion of it has entered the rifled part of the barrel of the firearm.
- 4. A low energy cartridge as claimed in claim 1,2 or 3 wherein the means for causing the telescopically slidable portions to telescopically extend include a gas releasing device positioned to the rear of the rear telescopically slidable portion, an open ended

WO 2005/054775 PCT/GB2004/004994

10

gas passage extending through the portion and forwardly of the gas releasing device and a closure member sealingly slidably located in the gas passage.

- 5. A low energy cartridge as claimed in any of claims 1 to 4 wherein the means for causing the telescopically slidable portions to telescopically extend includes a primer positioned to the rear of the rear portion and an open ended gas passage extending through the portion and forwardly of the primer.
- 6. A low energy cartridge as claimed in claim 5 further including a propellant charge ignited by the primer and positioned between the front and rear telescopically slidable portions.
- A low energy cartridge as claimed in claim 4 or 5 further including a primer positioned to the rear of the front portion and an open ended gas passage extending through the front portion and forwardly of the primer, the open ended gas passage being closable by a projectile.
- 8. A low energy cartridge as claimed in claim 7 as dependent from claim 4 wherein the primer of the front portion is initiated on impact of the closure member with the primer.
- 9. A low energy cartridge as claimed in any preceding claim wherein the outer casing is shaped so as to include at or near each end an inwardly jutting surface which serves to stop the telescopically slidable portions separating from the outer casing when they extend.
- 10. A low energy cartridge as claimed in claim 9 wherein the inwardly jutting surface comprises an annular flange having an inner radius

WO 2005/054775 PCT/GB2004/004994

11

which is slightly smaller than the largest radius of the corresponding telescopically slidable portion.

- 11. A low energy cartridge as claimed in any of claims 4 to 10 wherein the closure member comprises a plug which has a cross section in a direction perpendicular to the direction of travel of the telescopically slidable portions, of similar shape and size to that of the gas passage of the first telescopically slidable portion.
- 12. A low energy cartridge as claimed in claim 11 wherein the closure member is substantially spherical.
- 13. A low energy cartridge as claimed in claim 12 wherein the closure member is a ball.
- 14. A low energy cartridge as claimed in claim 13 wherein the ball is made from steel.
- 15. A low energy cartridge as claimed in claim 13 wherein the ball is made from a plastic material.
- A low energy cartridge as claimed in any of claims 4 to 13 wherein the closure member has an outer surface which is selected to be of a low friction material so as to allow the member to easily slide along the gas passage.
- 17. A low energy cartridge as claimed in any preceding claim further including at least one gas tight seal between a telescopically slidable portion and the outer casing.
- 18. A cartridge substantially as described herein and with reference to the accompanying Figures 2 to 4.